

# THE FARMER & GARDENER.

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**American Farmer Establishment.**

BALTIMORE: TUESDAY, MARCH 28, 1837.

## VALUE OF CORN STALKS AS PROVENDER.

No one who may not have essayed an experiment to that effect, can form any idea of the vast amount which may be saved by the practice of a system of enlightened economy on a farm. Nor can he form any just estimate of the valuable purposes to which many things which are cast away as almost useless, may be applied. We were very forcibly struck with the force of these propositions a few days since, on seeing the fine condition of a *Devon* cow, that we purchased for a gentleman in South Carolina, and which had been subsisted during the whole of the past winter on *corn stalks* and *ruta бага*. Ninety out of a hundred farmers, throw their corn stalks into their barn yards, to be trodden under foot by their cattle, and the custom has become so universal that any one who should deviate from the rule would, in many neighborhoods, be looked upon as an innovator, who had sinned beyond the saving influence of repentance. When an individual, however, is found possessing the moral courage to rise superior to those prejudices which have been hallowed by time, they deserve not only the full fruition of the profits and advantages of their improvements, but are entitled to the thanks of the community. The cow in question, we bought of Mr. Richard Caton, and on inquiry as to her keep through the winter, learned that, she, together with some 60 or 70 others, of which his beautiful herd of *Devons* consists, had been exclusively fed on the articles we have before named. Heretofore they have, each winter, been generously served with timothy, or clover hay, and Swedish Turnips; but with a view of testing the value of the corn-stalk as a provender for cattle, and of being

thereby enabled to sell his hay, he cut his stalks, the which, together with turnips, he submitted to the action of steam, and has had the gratification to find his most sanguine expectations more than realized. His stock has not only eaten their new fare with avidity, but have thriven well, having come through the winter in high health and condition, and are now in as good order as the majority of beef cattle. The *Devons* it is true are a thrifty race, easily kept, and will maintain flesh upon less feed than almost any other breed; but it is equally true, that the process of steaming restores so much of the saccharine matter to the stalks, renders them so easy of digestion, as to make them at once as palatable as they are nutritious. Hence there can be no doubt of the great economy in this disposition of them, because, besides returning to the earth an equal portion of manure, they serve the two fold purpose of substituting other and more saleable provender, and of sustaining stock fully as well, if not better than the best hay, be the kind whatever it may.

Let us see how far an acre of stalks will go. If this quantity of ground in corn will yield one ton of fodder and tops, we set it down as a demonstrable fact, that it will give two tons of stalks; so that any given quantity of land will furnish a hundred per cent. more of the latter than the former.

If it should be asserted that the trouble of cutting the stalks is an objection to their use, we would remark that there are always a sufficient number of inclement days throughout the winter, when hands cannot be occupied out of doors, to perform all the labor requisite to prepare them, without its bearing in the least as a tax upon time. Of the expense of a cutting box, we will not speak, as no farmer or planter, without detriment to his interest can be without one, and should it be said that steaming is an onerous preparation, and that the fixtures are costly, we would reply, that it is neither one nor the other. An ordinary sized pot, fitted up in a furnace, with sufficient number of oblong boxes, with tight covers, to hold the requisite quantity of provender is all the fixtures that are necessary; 40 gal-

lons of boiling water poured upon half the number of bushels of cut stalks, would in one hour cook and render them fit for use. Surely then, there is no individual worthy of pursuing the noble calling of a cultivator of the earth, who would maintain such objections to the impairment of his real and substantial interests.

## A CORN MEAL RUSK.

Among the many delicacies in the form of bread, which render the enjoyment of breakfast so acceptable, we know of none more deserving of notice than the one prepared according to the following recipe:

Take 6 cupsful of corn meal, 4 of wheat flour, 2 cupsful of molasses, and 2 tablespoonsful of *sal aractus*, mix the whole together, and knead it into dough; then make two cakes; bake them as you would pone, for three fourths of an hour, and you will have one of the most grateful descriptions of bread that ever graced the table.

## THRESHING MACHINE.

We were present some days since to witness the operation of a new threshing machine patented by Mr. Tyler, of Massachusetts; we were highly pleased at its performance, and think it an effectual labor-saving machine; though we are not aware that there is any thing very novel about it, unless the application of its balance wheels, to its peculiar objects, be so. But whether there be any or not, we think it eminently calculated to facilitate the business of getting out grain. With the requisite number of hands for turning, feeding, clearing off the grain, and packing away the straw, we presume, from what we witnessed, that it would be able to get out from 75 to 100 bushels of rye or wheat, and from 100 to 150 bushels of oats in a day. This would be sufficient for all except large grain growers, and these might be accommodated by either increasing the dimensions of the machine and giving it horse power, or by multiplying the number of the machines. It will be seen, from what we have written, that the power used in its propulsion is man; that, however, could be easily changed, as it is adapted to the application of any other. From its compact and convenient

size, it could be worked in a room of very moderate proportions, and we have no hesitation in declaring that we think it a valuable addition to the labor saving family of agricultural implements.

### CARROT FIELD CULTURE.

We had a conversation a few days since with a *Yankee Farmer*, on the above subject, and being pleased with the course of his remarks, we prevailed on him to commit them to writing, in the hope that as the season is now approaching when this fine vegetable may be sown, we might, by bringing the topic to the notice of our readers, induce some of them to try the experiment of raising a crop for feed for their milch cows. The *Parsnip* too, should command attention; the same mode of culture will serve for them as for the carrot, with these exceptions—that the drills should be about 18 inches apart and the plants stand about 4 inches asunder.—Thus planted in the month of April, in suitable soil, manured with well rotted manure, or a compost of spent ashes and mould, kept clean and hoed three times, they would yield from 500 to 1,000 bushels of roots to the acre, which might be left in the ground all winter to be dug up as wanted for feeding.

To those who desire to have *butter* in winter, possessing all the virtues of that article made from cows fed on *May* pastures, it will be only necessary to say that by a very little trouble they may realize their wishes.

The communication alluded to above will be found subjoined.

[For the Farmer and Gardener.]

The carrot flourishes best on a loam or sandy soil. The ground should be prepared by ploughing very fine to the depth of ten or twelve inches, fine manure, in quantity sufficient for common crops should be ploughed in, and the ground harrowed merely sufficient to level it, the seed should be sown in drills from twelve to fourteen inches apart; a machine made for the purpose is the best for sowing: four or five plants to a foot is sufficient to be left to come to maturity; a good day for planting corn is a good day for sowing carrot seed. The crop is usually from four to five hundred bushels to the acre. There is not a more profitable crop for feeding stock, raised in the N. England States, than the carrot, where the soil suits the crop; with a little more labor, you will get as many bushels of a much richer vegetable than the potatoe. One experiment has been made, by putting six cows into the stalls in December and feeding five with corn-meal and hay, and one with corn-meal and carrots, and when slaughtered, the one fed with carrots was pronounced the fattest and handsomest beef. They are equally good for milch cows,

increasing the quantity, and adding color and richness of flavor to the butter, but little if any, surpassed by the best pasturing. They can be profitably used in many other ways by a farmer.

[From the Germantown Telegraph.]

### OATS.

There is a difference of opinion among farmers as to the proper time for sowing oats. While some contend that it is best to sow as soon as the frost is out sufficiently for the land to be worked, others insist on a different course, and choose not to sow until the ground has become quite dry and warm. It may be a fact that late sowed oats in some and perhaps in most instances, produce a greater quantity of straw than those early sown, and it may be and probably is true in as many instances, that the grain is proportionably lighter, so that if weight of grain is the prime object, that course of procedure as it respects sowing, is best, which is most likely to produce the desired result.

There seems to have been a general failure in the crop of oats through this part of the country the past season, there being but few instances, were they are so heavy by one-third as they have been in other years, when no calamity has befallen them.

Notwithstanding the general failure, I had as good a crop of oats the past season, as in any former year, having over one hundred bushels, from little more than two acres of ground, weighing thirty-three lbs. per bushel. Such being the fact, it is a question with myself and others, what should be the cause of my obtaining a better crop than any other farmers in the neighbourhood. That which to me appears as the probable and only cause, is early sowing. Although my ground was in no better condition than land in general, I sowed my oats several days earlier than other farmers in the vicinity.

There were several fields contiguous to mine, where the soil and cultivation were not essentially different, but which were sowed a few days later, which in every instance failed to produce a middle crop. I have always been in the habit of sowing my oats as soon as possible after the ground had become settled, believing it to be the better way, and observation and experience the past season, have only strengthened my belief, that such a course is a correct one.

A FARMER.

With respect to the time of sowing oats, there is no such thing as affixing a day. Every farmer must be guided by his own locality. As a general rule it is always safest to sow them as soon as the ground will admit of ploughing without danger of baking from being too wet. The sooner they are got in the better, as oats delight in a cool and moist atmosphere, and hence it is that the Irish and English oats are generally heaviest in Great Britain, while in this country, the northern or such as are grown in the Glades, take the precedence. If oats be sown at the proper period, and are followed by any thing like a fair, or tolerably

fair season, there is but little doubt of their making a remunerating crop. It is, however, a lamentable fact, that with us they are most generally assigned the poorest spot on the farm, and are left unaided by manure to struggle to maturity, and when reaped if not as good as the seed were, they are libelled with the imputation of having degenerated, whereas the true fault lies with the grower, in not having given them a fair chance of perpetuating themselves in perfection. Although they will grow in any soil, like all other members of the grain family, they grow best when nourishment is given them, and the farmer who expects first rate oats without laying a proper groundwork for their growth, does most certainly lie under a most fatal delusion.

As to the quantity of seed, if sown without clover or other grass seed, less than 2½ to 3 bushels to the acre should not be sown; where sown with grass seeds 2 bushels is enough, and the ground would be the better of two ploughings.—[Editor Farmer and Gardener.]

The last advices from Europe represent a depression in the price of cotton, owing doubtless to the derangement of the money market.

### SOWING CLOVER SEED.

Extract of a letter from a subscriber at Cayuga: "As the time for sowing clover seed is approaching, some note in your paper of practical farmers on that subject may be of some service, and save some trouble of complaining of the loss or failure of their expected crop of clover. For several years past I have practised sowing my seed the last of March or first of April, when we have frosty nights and thawing days. The mornings then are generally still—the surface of the ground is raised by the spears of ice formed during the night—and if the seed is cast on the ground such mornings, it finds its way through the crevices occasioned by the ice beneath the surface of the earth sufficiently deep to protect the young plant from the droughts of April or May, by which our clover crop is frequently destroyed, if the seed is sown when the surface of the earth is compact. Since I have practiced in this way, I have not failed in a single instance of having a full crop of clover."—*Genesee Farmer*.

Remarks by the editor of the Farmer & Gardener.

There can be no doubt that a large quantity of clover seed is lost by means of its perishing on the surface, whether sown during the frosty nights and thawing days, or at a more late period of the season, but this might be obviated if the time of sowing was delayed until the ground was tolerably dry. As soon as it is cast upon the ground a light harrow should be passed over the field; the seed thus sown would be covered and placed in a situation to vegetate to a certain



ty. Immediately after harrowing, the ground should be rolled. It may be objected to this that the young wheat or rye plants will be dragged out of the ground and injured, but on the other hand whatever might be drawn out by the harrow, would be replaced by the roller, and the increase from cultivation and tillering would very far exceed the injury spoken of. Indeed, all rye and wheat fields, whether sown with grass or not, would derive benefit from undergoing this process, as there can be no question that the stirring of the ground would add greatly to the growth of the plants; for there is no truth which holds better, than that every thing that vegetates is benefitted by cultivation.

### RISE AND PROGRESS OF AGRICULTURE.

The antiquity of this art is undoubtedly beyond that of all others. From the earliest accounts of the eastern nations, we have reason to think, that agriculture had been understood by them to considerable perfection: seeing they were always supplied not only with the necessities, but the greatest luxuries of life.

As soon as the descendants of Abraham were settled in Palestine, they become husbandmen, from the chiefs of the tribe of Judah to the lowest branch of the tribe of Benjamin. High birth or rank did not at that time make any distinction; for agriculture was considered as the most honorable of employments.

The Chaldeans, who inhabited the country where agriculture had its birth, carried that valuable art to a degree of perfection unknown in former times. They cultivated their land with great assiduity, and seem to have found some means of restoring fertility to an exhausted soil, having plentiful harvests in succession; on which account they were not obliged, as their predecessors had been to change their situation, in order to maintain a sufficiency for themselves and their numerous flocks and herds.

The Egyptians, who, from the natural fertility of their country by the overflowing of the Nile, raised vast quantities of corn, ascribed the invention of the art of agriculture to Osiris. They also regarded Isis, their second deity, as the discoverer of the use of wheat and barley, which before grew wild in the fields.

It is also related of the ancient Persians, that their kings laid aside their grandeur every month to eat with husbandmen. This is a striking instance of the estimation in which they held agriculture: for at that time other arts were practised among the people in great perfection, particularly those of weaving, needle-work, and embroidery. The precepts of the religion taught by the ancient magi, or priests, included the practice of agriculture.

The Phœnicians, better known in scripture by the name of Philistines, were remarkable for their attention to, and skill in agriculture; but finding themselves too much disturbed and confined by the incursions and conquests of the Israelites, they spread themselves through the greater part of the Mediterranean Island, and carried with them their knowledge of the art of cultivation.

The Athenians taught the use of corn to the rest of the Greeks. They also instructed them to cultivate the ground, and to prepare it for the reception of the seed. The Greeks soon perceived that bread was more wholesome, and its taste more delicate than that of acorns and the wild roots of the field. Hesiod was the first we know of among the Greeks who wrote on this interesting subject. He lived about nine hundred years before the Christian era.

The ancient Romans esteemed agriculture so honorable an employment, that the most distinguished Senators at their leisure intervals applied themselves to the cultivation of the soil. Numa Pompilius, one of their kings, was much distinguished for his skill in agriculture; and such was the amiable simplicity of those times, that their greatest warriors and legislators were often called from the active labors of the field to the highest offices of the State. Regulus, the celebrated Roman General, when in Africa, requested of the Senate to be recalled, lest his farm might suffer for want of proper cultivation in his absence; and the Senate wrote to him for answer, that it should be taken care of at the public expense while he continued to lead the armies. Cato the censor, Varro, Virgil, Columella, and other distinguished Romans wrote on the subject of agriculture.

In China, a day is still annually appointed when the Emperor goes in solemn procession to a field, where he shows his sense of the inestimable benefits of agriculture by undertaking for a short time, the laborious occupation of directing the plough in person.

Previous to the establishment of the Romans, the cultivation of the soil was but little understood in Britain. By their assistance, however, it experienced considerable improvement, inasmuch that the Britons were enabled annually to export large quantities of grain. Subsequent to this period, it has been continually advancing in its progress, and has now attained a high degree of perfection. Societies have of late years been formed for the purpose of encouraging this and other useful arts; and a plan has been proposed for introducing the study of agriculture into schools and making it a necessary part of national education.

In the year 1576, a period of difficulty and distress, France began to pay particular attention to this important subject. Prize questions were annually proposed by the academies of Lyons, Bordeaux, and by the society instituted for the improvement of agriculture in Brittany. About this time, it was also greatly encouraged in Russia, Sweden Denmark, Germany and Italy; in the last mentioned country, a private gentleman, about 30 years ago, left his whole fortune to the establishment and support of an agricultural society.

Whether we consider agriculture as a means of procuring as well the necessities as the luxuries of life, or of providing a security against the aggravated calamities of scarcity, famine and disease; or of engaging the mind in active and extensive pursuits of general knowledge, it is one of the most important and useful arts which have employed the attention of mankind. Its theory is, in a great measure, dependent on several branches of science, such as national history, chemis-

try, experimental philosophy, and mechanics, all of which may be successfully applied to its advancement; and without a competent knowledge of these, it cannot be properly understood. Its practical part, however, may be carried on, independently of scientific experiments. No person therefore need be deterred from attempting any improvements, because he is not conversant with the more abstract parts of physical knowledge.

The flourishing state of manufacture is greatly dependant on that of agriculture; because the price of those commodities obtained by labor, is not only closely connected with that of the necessities of life, but some of the most considerable articles of manufactures are originally supplied, by agricultural productions, such as wool flax, hemp, rape-seed, tallow, &c.

The successful advancement of the rural art depends on two circumstances: the one, its improvement by discovery or invention; the other a mere extensive practice of such improvements when fully demonstrated. The former is effected by the contrivance of more perfect machines and implements of husbandry, which facilitate the progress of labor; the introduction of new articles of profitable culture, and the most advantageous mode of treating those which have already been cultivated, though in a defective manner. The latter, namely, the practice, relates not only to future improvements, but likewise to those which, though generally known, have been either wholly neglected, or adopted only in peculiar places.

[From the Rockville, (Md.) Journal.]

**DOMESTIC SILK.**—We publish in to-day's paper, the Message of his Excellency, Gov. Veazey, to the General Assembly, upon the culture of the Mulberry and the manufacture of Silk.

We have heretofore expressed our opinion upon this subject, and our decided approbation of Mr. Roberts' valuable publication. We are pleased to see that it has been made the subject of a special message, and hope such Legislative action will be had, as immediately to give patronage to the work in question, and by widely disseminating the useful information which it contains, thus foster and encourage a most useful and profitable branch of domestic industry. It is stated in the message, "that in most of the States north of Maryland, and particularly in Connecticut and Massachusetts, the silk business has been prosecuted on an extensive scale for several years past, and with uniform success." We believe there are few counties in Maryland, where some advances have not been made in this laudable undertaking; and these experiments "unaided by science or experience," have, as far as we have heard, been very successful.

There is now for sale at a store in this place, sewing silk, of excellent quality, and various colors, manufactured by several young Ladies of this neighbourhood, from worms fed on the common mulberry. We have frequently seen in various parts of the State, specimens of "domestic silk" which in richness of colouring, fineness of quality and beauty of texture, would bear comparison with the best of foreign manufacture; but when considered as evidences of the ingenuity, industry, and we may say, patriotism, of our fair country-women, are more to be admired, than the tyrian purple of the robes of royalty.

# GEOLOGICAL SURVEY OF MARYLAND, (CONTINUED.)

## Sec. 3.—Geological examinations made in Anne Arundel county.

The principal examinations that have been made in this county, were for purely scientific purposes, the details of which will be given at another time. The remarks in reference to them will be mainly confined, at present, to an indication of the fossiliferous deposits that may be used as marl, and an account of some localities where other materials, considered to be likewise applicable to useful purposes have been discovered.

It was to be supposed that the marl beds of Calvert would not cease to make their appearance with the limits of that county, and accordingly, they are found to present themselves under the same circumstances that have been already described, in the lower parts of Anne Arundel.

The cliffs at Herring bay, of much inferior elevation to those of Calvert, have for substratum a greenish sand of variable depth to the water line, the upper portions of which contain an irregular stratum of a grayish black sand filled with fragments of organic bodies, among which may be recognized sharks' teeth, fragments of bones, and silicious casts of a jet black color belonging to some spiral and other shells. The greenish sand itself contains fossils, but so decomposed, that their characters could not be determined. They appear to belong mostly to a species of oyster, perhaps analogous to those hereafter to be described as occurring on the Patuxent, at Milltown. It is not believed that this material can be employed advantageously as marl. The account of it is given simply to indicate the nature of what appears to be the lowest fossiliferous deposit in the part of the county now under examination. That such a substratum exists very generally, extending through the portion of country lying between the Chesapeake bay and the Patuxent, and even through that which lies between this river and the Potomac, is shewn by the recurrence of a similar deposit in several places where the excavation of a running stream has penetrated to a sufficient depth to exhibit it. A remarkable and extensive deposit of this character was seen on the headwaters of Lyon's creek, south side. It consists of a stratum about three feet in depth, containing the same species of oyster just referred to, covered by one embracing numerous silicified casts of small spiral and bivalve shells. An analogous deposit was met with on the Patuxent at high water mark, and others were described in the report of last year, as occurring in several places in Charles county, at the heads of creeks emptying into the Potomac.

In the very centre of the peninsula, a deposit of the same kind was reached in the sinking of a well. The account of this excavation, as furnished by Dr. J. S. Owen, on whose plantation it was made, is both interesting and instructive. The different strata that presented themselves were, in the descending order, as follows:

1. Rich black vegetable mould, 1 foot.
2. Tough clay, 12 feet.
3. Sand with very little gravel, 3 "
4. Clays of various kinds, distinct layers, 10 "

5. A dark ash-gray bed, very compact and firm, requiring the pick-axe for some few feet, and fracturing into large flakes: then sandy, somewhat firm, the colour a shade darker, and continuing so without any marked difference to the bottom of the well, 46 feet

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72 feet.

Six feet within this dark ash-gray bed, and thirty-two feet from the surface, there were found two vertebrae, and parts of several ribs of a species of *Delphinus*, the remains of which so very generally accompany the other marine exuviae in our fossiliferous deposits. It may be well to remark in this place, that a species of *dolphin* (*Delphinus luca*) is at present a frequenter of the waters of the Chesapeake Bay, several of them having been caught in the course of the last spring, and one of them exhibited in the Baltimore Museum, under the name of *Baluga whale*. Vegetable matter was found a few feet below the bones in considerable quantity, but exceedingly decayed. These were intimately blended with a fine compact earth, and when separated had a knotty appearance. No shells were found near the bones, but their impressions were observed to be in great abundance, few in the upper parts, but a great number lower down. About twenty-eight feet below the bones, a bed (one foot thick) of oyster shells, described as being remarkable for the thickness of their valves, was traversed; and a few feet below them, a number of shells, and some few sharks' teeth, all in a good state of preservation, were collected. These shells having been sent to Philadelphia, are said to have reached their destination in a very mutilated state; those that could be referred were 'the *Pecten Jeffersonius*, *Turritella pleccia* of Say, and *Venericardia Blandigii* of T. A. Conrad, together with other well known tertiary shells.' But on producing some of the indurated casts of the small spiral and bivalve shell previously mentioned, they were recognized by Dr. Owen, as the associates, in that part of the deposite in which the oysters were discovered.

The fossil deposits that may be explored for marl are found at a greater elevation than those just described; they are believed to correspond with the lowest and middle deposits, containing organic remains, of Calvert county, and will afford a shell-marl of very good quality. The uppermost fossiliferous stratum designated as occurring in Calvert, has also probably its analogy in the silico-calcareous masses, of various size, covered with impressions of shells that are found strewn over the surface of the country between the lands of Hall's and Lyon's creek. They appear to have belonged to a deposit of fossils, since broken up, the fragments of which are thus scattered over the surface of the country. In the neighbourhood of Friendship, Anne Arundel county, there are large masses of these silicified shells forming rocks that have actually been quarried for the underpinning of out-houses.

Marl of excellent quality abounds, however, in this vicinity. It had been discovered by Dr. B. C. Carr in the public road, whence a small quantity was hauled and applied to a very poor spot in a corn-field, and although used in the

manner least calculated to show its properties, has nevertheless been accompanied by marked good effects. Dr. Carr having since discovered it in greater abundance and of superior quality on his own plantation, it will no doubt be liberally employed.

At Herring-bay, on the plantation of Mr. John Scrivener, there are two fossiliferous deposits: one corresponding with the lower marl beds of Calvert, and occurring in the ravines of water courses; the other near the top of the hills. The fossils in this latter deposit are principally *Pecten* and some *Perna maxillata*. As the contents of this bed can be easily removed, it is to be hoped that they will be extensively used. The marl in this place, though not very rich in calcareous matter and somewhat sandy, may still be used with great advantage in the proportion of about three hundred bushels to the acre, applied to the stiffer, clayey soil that occurs on the plantation.

Other deposits of a similar character but of more limited extent were observed in several places, but so far only south of Weems' creek on the Bay side, and Lyon's on the Patuxent side. On the other hand, in all the branches emptying into these two creeks, as well as in Hall's creek, the richer and more clayey marls occur in the greatest abundance. Directions were left that this marl should be used in the same manner as previously recommended to the planters of Calvert.

At the steamboat landing at Herring bay, there is also an extensive Indian shell bank, on the plantation of Mr. Garner, which together with the preceding deposits, should be looked to as affording abundant means of improvement to the agriculturist of the lower parts of Anne Arundel county.

As yet no fossil deposits available as marl have been discovered in that part of the county, known as the West river district; but it has already been seen that a substratum of that nature probably exists here also. The character of the superincumbent soil is, on the other hand, very different. As in the neighbourhood of Friendship, it varies from a sandy loam to a clayey loam; but it is much more ferruginous, being in some places almost an ochre, and is frequently much mixed with green sand, the quantity of which increases on the approach of South river. All the soils of this district are more or less favourable to the growth of tobacco, and produce abundant crops of oats and corn. They have been greatly improved by the use of plaster and clover, and in their present condition already form some of the most valuable landed estates in Maryland. It is believed, however, that they might be still more improved, if they could be conveniently supplied with lime.

The existence of the green sand in these soils is an interesting circumstance, indicating as it does, the approach, if not the existence among them, to what has been heretofore considered to be another agricultural resource. Thus at Lyle's mill stream, which is near the dividing line between Calvert and Anne Arundel, a deposit of green sand occurs, accompanied by some remarkable appearances. It is covered by a horizontal stratum, possessing some of the characters of the hornstone of mineralogists. The upper portions of the rock, which are not so compact at the



mass, exhibit obscure impressions of shells. In some places, the green sand is very nearly pure, yielding to analysis as much as nine per cent. of potash; in others it is mixed with what in a former report has been termed a micaceous black sand, and finally is entirely replaced by the latter. This green sand was again observed in the branches north of Lyon's creek in Anne Arundel county, and on the plantation of Mr. P. Pindal, who has determined to give it a trial, the result of which cannot yet have been ascertained.

This material has been found identical in chemical composition, with the celebrated Jersey marl, and no reason can be imagined why it should not produce as good effects upon the soils of this state, as it is known to have done upon those of New Jersey; except that the specimens hitherto examined have not yielded so large a proportion of potash, to which it is supposed to owe its fertilizing properties, as is reported to be found in the marl of the latter state. But the samples of this sand that have been collected in Maryland, were taken from the superficial portions of the deposits, as no excavations into them have been so far made; they may hence have been deprived by exposure of a portion of this essential constituent. It is more than probable that the interior portions of the bed would be found to yield a large percentage of potash, which with us has only once exceeded five parts in the hundred; whereas in Jersey it has reached to twenty per cent. The importance of the subject merits that it should be fully investigated; whilst it is the interest of the farmer, at the same time, to test the value of the material by direct application.

The soil in the vicinity of Annapolis, which is highly ferruginous, contains also in many places a large proportion of green sand. Here, as well as on the main road between this city and Baltimore, large masses of a ferruginous sandstone are met with containing impressions of shells. Similar masses of an agglutinated sand rock abounding in green particles, and showing some obscure impressions and fragments of the testæ of marine animals are found. And again other masses of compact white sandstone occur, very similar in the mode of their aggregation to those that constitute the *white rocks* at the mouth of the Patapsco. These rocks are not boulders, as they bear no appearance of having suffered attrition of any kind; they seem to have become indurated in the situations where they are now discovered, under the influence of circumstances which it is now difficult to appreciate.

The banks of the Severn, on either side, are elevated, and consist of highly ferruginous sands, in some places indurated into a coarse ferruginous sandstone. This is also the character of a great portion of Broadneck, between the Severn and the head of Magothy river. It is in the midst of these ferruginous sands, that deposits of the material to which the name of micaceous black sand has been applied, are found. On Round Bay, what are called the *blue banks*, are composed of this sand, containing particles of green sand, and enclosing fossils, or rather casts of fossils, but so obscure and so friable, that they can scarcely be referred to these prototypes. Among them, however, casts of the *cuculea vulgaris*

and *turritella Mortonii*, are distinctly recognized. The mineral characters of the deposit are very similar to those of an analogous one described in the report of the last year, as occurring in Kent county, and which is there in an indubitably green sand formation.

But the reason for directing the attention to this deposit at present, is because, as was mentioned in a preceding report, it has actually appeared to afford an agricultural resource of some value. An analysis of it shows that though principally composed of silex, or sand, and alumine, it contains likewise small portions of lime, potash, oxide of iron, sulphuric acid, volatile and resinous matter, with besides some vegetable extractive matter; and it has already been suggested, that a view of its chemical composition leads to the belief, when applied to the soil, such an arrangement of its constituents might be produced, as, by the decomposition of the sulphates of iron and alumine that are spontaneously formed within it, would give rise to the formation of a sufficient quantity of sulphate of lime, or gypsum, to account for the good effects that have resulted in several instances already from its application as a top-dressing to grass crops. It is necessary, however, to add a caution against its indiscriminate use, as the free acid which it sometimes contains, might prove injurious; though nothing is apprehended in using it at the rate of from twenty to thirty bushels to the acre.

Another material which is extensively used on the continent of Europe, as a *stimulating manure*—for so it is called, and is to be considered as one of the mineral products of Anne Arundel county, are the *ashes* that are derived from the spontaneous combustion of the *Lignites*, or fossil mineralized wood, and *pyrites* that occur in such abundance at Cape Sable, on the Magothy river. These ashes form the principal material employed in the manufacture of alum and copers at the Baltimore works; they are used for the purpose in many similar establishments in France; but are also sometimes obtained solely for the purpose of affording a supply of this sort of manure. The French writers on chemistry applied to agriculture, who give them the name of *RED ASHES* (*Cendres rouges*), ascribe to them the greatest virtues. They are said to be used even before they have been lixiviated, or washed; that is before the salts which they contain have been extracted from them; but in this state it is also said of them, that they are apt to affect unpleasantly the eyes of both men and horses in spreading them: hence a preference is given to such as have been lixiviated. The best are described as being very red, light, fine, and possessed of a styptic taste, due to a small quantity of copers, which they retain. The demand for these ashes is represented to be very great, the sale of them in the sole province of Picardy amounting to upwards of three millions of bushels annually. Unfortunately no directions are given about the method of using them, or as to the quantity to be employed. It is probable that they are used as a top-dressing in the same way as plaster of Paris; and it is evident from their nature that they must be employed with some precaution. The great consumption that is made of these ashes in France, where more attention

is paid to mineral manures than in any other country, suggests the propriety of testing their efficacy upon the soils of Maryland. They can be obtained in any quantity at the 'Baltimore Alum and Copers Works,' on Locust point, at which place they are at present an incumbrance. It is proposed with the assistance of the intelligent proprietors of these works, to institute with the ashes a series of experimental trials in the course of the ensuing year.

Finally, and to conclude what remains to be said of the economical geology of Anne Arundel county so far as it has been determined to this period, it may be well to indicate the occurrence of beds of plastic clay, of considerable purity, on the banks of the Severn, at Round Bay. There are also in adjoining localities deposits of a very fine white sand, free from any admixture of mica, that would, it is believed, be found well fitted to the manufacture of glass. And at the head of Severn, beds of ochre, of a deep red colour will be found. Should these materials prove desirable to the various arts which they commonly subserve, every further information to facilitate their acquisition will be given by Capt. Wales, of Annapolis, whose barge under his own command was chartered for the purpose of exploring the river, and who is therefore well acquainted with the best location of these several substances.

#### MASSACHUSETTS LEGISLATURE.

House of Representatives, Feb. 20, 1837.

#### REPORT AND BILL TO ENCOURAGE THE MANUFACTURE OF INDIGENOUS SUGAR.

The committee on Agriculture, to whom was referred the Order of the House of January 21st, "to inquire what measures, if any, are necessary to introduce and encourage in this commonwealth the culture of the sugar beet," have taken that subject into consideration, and unanimously ask leave to submit the following

#### REPORT:

If we may credit statements that appear to be well substantiated, the culture of the sugar beet may contribute as largely to the improvement of our agriculture, as the turnip culture has to that of Great Britain; and if encouraged, will not only give our farmers a most valuable addition to their field products, but save to the State large sums of money annually paid out for foreign sugar.

On several accounts this culture merits particular consideration. As a cleaning crop, for the destruction of weeds and for pulverizing the soil, it is as effectual as a naked summer fallow, without its attendant exhausting and pernicious consequences. As an ameliorating or enriching crop, it will take the precedence of our most enriching grasses, in the amount of vegetable matter returned to the soil, or product of nutritious food for any description of farm stock, and at the same time afford, in sugar, a larger marketable value than the same land will produce of the exhausting crops of wheat or corn.

These facts will account for the enthusiasm with which this culture is regarded in France; and if true, fully sustain the opinion of your Committee that encouragement, for the growth of

the sugar beet in Massachusetts, is dictated by sound wisdom, and eminently calculated to promote her agricultural interest.

It is believed that it will in some degree break the charm that rests upon old usages and customs, which are followed for the very substantial reason that they have been followed by generations past, and introduce a better and more enlightened system of rotation or alternation of crops; that it will dispel somewhat the prejudice existing against new plants or implements, or new modes of culture, by contrasting among our farmers, stronger than has yet been done, the superiority of improvement over antiquated notions; and by fertilizing his lands, increasing his various agricultural products, and his ready capital, furnish both the farmer and his sons profitable employment at home, and stay the tide of emigration to the south and west,—our climate securing to us, in the beet, an article of produce with which those regions probably cannot successfully compete.

The fact that our soil will readily produce beets, is within the experience of almost every farmer in the State, and there is no reason to doubt that, both in quantity and quality, it will give crops equal to the soil of France.

In 1830, the Massachusetts Agricultural Society awarded Mr. Gideon Foster, of Charlestown, a premium for one acre, yielding forty-three tons, nine hundred and sixty-one pounds of scarcity beet,—a variety which, though not considered the best beet for sugar, is said to be extensively cultivated in Europe for that purpose. This crop, estimated by Mr. F. to cost \$35 for cultivation, was very large, perhaps more than double the weight of those considered good crops in France, or that may be expected from ordinary good land and cultivation here, but still it shows what can be done. And as this is the only well authenticated account of the product of an acre exclusively of beets, cultivated in Massachusetts and known to the Committee, (although there may be many others,) they will make it the basis of some calculations to show the value of the beet culture; bearing in mind that this quantity of beets was given only by land in the highest state of cultivation, such as would probably give one hundred bushels of corn, or fifty bushels of wheat, in a favorable season.

Beets of good quality are said to contain ten per cent. of saccharine matter, capable of chrysalization. But in the present state of improvement in the manufacture, six pounds of sugar from 100 pounds of beets seem to be thought a fair estimate. From the same quantity of beets, after being submitted to the rasp and press, there remains also thirty pounds of pomace, and 60 pounds of pomace is considered a fair daily allowance of feed for a fattening ox. These estimates are of French authority, and however well or ill they may bear the test of experience in Massachusetts, we have at present no others from which to make our calculations.

Apply these estimates to Mr. Foster's crop of 43 tons and 961 pounds, and they will give 5217 pounds of sugar, and 434 days' or more than fourteen months' feed for a fattening ox. The value of this feed, and the means it will furnish for enriching the soil, will be seen at once by the

farmer. Estimating a day's feed equal to one peck of corn (the usual quantity given a fattening ox per day, in addition to hay,) and its value would equal 108 1-2 bushels of corn. Add to this the 95<sup>95</sup>/<sub>100</sub> dollars balance received of the manufacturer for the juice extracted,—which it will amount to, estimating at the proportional difference at which they have been sold in France, the beets at \$4 per ton and the pomace returned at \$6 per ton—and also the great quantity of leaves and tops left on the ground cultivated, at least half equal to a dressing of manure, and it will be very difficult for any one to see that the beet culture, if successfully introduced, will give thrift to the cultivator and energy to the soil. If there is any crop cultivated by our farmers, which gives a return half equal to this, without exhausting the soil, it is not known by your committee. It may be recollected also, that less than two thirds of the sugar is obtained by the present process, and improvements in the manufacture are constantly progressing.

The expense of manufacturing the sugar here, cannot be known until tested by the experiment; but we see no reason why it may not be manufactured here, after having been fairly brought within the scope of yankee ingenuity and enterprise, as cheap as in France. Such is found to be the case with heavy cottons, or substantial goods or wares of many kinds, not requiring a great degree of extreme nicety and fancy, or of chemical knowledge in their manufacture.

The price of a day's labor is much less in France than here, but the difference in the price is probably not much greater than the difference in the effect of the labor; and if it were, the objection does no more forbid our raising beets than it does our raising other agricultural products, that are common to both countries.

By reference to the books of the customhouse, in Boston, it will be seen that, exclusive of what was reshipped, over twenty-six millions pounds of foreign sugar was imported into this city in one year ending Sep. 30th, 1836, at an expense to the importing merchant, exclusive of freight, of nearly \$200,000. From the foregoing estimate, it will be seen that it is possible to produce this amount of sugar from a tract of land less than three miles square. This is shown to be possible, but not probable, at least until great improvements, such as we may hope this culture will introduce, are made.

The possibility however of doing this, or any thing like it, or even half of it, may justly claim our most candid attention.

Two millions of dollars annually paid out of the State for a foreign product, which for aught we know, can, and eventually will, be raised cheaper with us than with them, is certainly matter for the grave consideration of legislators.

It is a subject permanent in its bearing, and assumes an importance, compared with which, many others that engage our liveliest attention, dwindle almost to insignificance.

Even the portion of the surplus revenue coming to Massachusetts, which has excited so much interest over the Commonwealth, amounts only to three fourths the sum annually paid out by her

citizens, for an article which her own soil might produce, without a whit's diminution of her present products. That this assertion is even less than the truth, will eventually be demonstrated; if the facts stated in regard to the sugar beet culture are correct.

For years no subject of equal importance to our agriculture has presented itself; and well may it be said that the vital interests of the Commonwealth are neglected, if this culture is not encouraged.

Let those facts, so well established in France—that this culture returns to the soil, in enriching matter, more than an equivalent for its heavy exactions, and at the same time affords ample returns for the labors of the cultivator and manufacturer, in a value that is not confined to the civilized world for a market; become established here, and it is not easy to estimate all its advantages. Its enlivening influence will be felt in every department of domestic industry and trade; and it hardly requires the gift of prophecy to say the time will not be far distant when we can add a third staple to our exports of "rock and ice."

Sugar, from having been considered a luxury, is now an indispensable article of subsistence for the poor and for the rich. Its production, cheap, and in abundance, from having been confined to the south, is now held out to the north; and shall we not with gratitude, accept the boon so unexpectedly offered us by a kind Providence, and aid its immediate culture, and secure its immediate benefits? or shall we leave it to the care of individual effort, and its benefits to those who succeed us in the active duties of life, if they shall be so fortunate as to possess the energy necessary to achieve its successful introduction?

The policy of giving encouragement for the introduction of a new staple, promising so much to enlarge the resources of our agriculture, can hardly be questioned, or its necessity doubted.—The farmer must depend upon the manufacturer for the sale of his beets, and the establishment, of manufactories is a work of time. Experience, skill and implements, in the first place must come from abroad, and be imported at considerable expense, or a course of experimenting adopted, likely to be still more expensive, if not ruinous. The various obstacles incident to, and almost inseparably connected with every new enterprise, and which in this case may be neither few nor small, must be overcome by the pioneers. This is well known at the outset; and under these circumstances, multitudes might believe, that eventually, this would be a great and profitable business, and not an individual be found ready to break the ice and commence the manufacture; so likely is it to be prosecuted more successfully by those who stand by and take first lessons from the experience of others, who run the risk and lead the way.

On the other hand, however much this culture may promise of success and profit, and however well those premises may be fulfilled; is it on that account less worthy the patronage of the government? Surely not. It cannot be the policy of an enlightened government to extend liberal patronage only to those objects which



promise a doubtful issue, but rather, if any are encouraged liberally, it will be those which promise to repay liberally.

In accordance with these views, the following Bill is submitted by order of the Committee.

WM. CLARK, JR. *Chairman.*

### ROTATION OF CROPS, POTATOES AND CORN.

Rotation of crops, is certainly among the most valuable of the modern improvements in agriculture. The scientific researches of many farmers have enabled them to discover some of the principles of vegetation, formerly but little understood. And it is believed that they will generally soon be fully convinced by experiment of the great benefits to be derived from rotation of crops. The different kinds of vegetables require nutriment peculiar to each class, and by planting the same kind on the same soil for a number of years in succession, the vegetables or plants degenerate for the want of their peculiar aliment; or as the common expression is, the soil becomes exhausted. It is therefore conceded to be an injudicious practice to cultivate the same crop, upon the same soil, for even two years in succession.

The same remark is applicable in horticulture; although a plentiful supply of manure annually, may afford some remedy for a previously exhausted soil.

By a judicious succession of crops, and the frequent use of that most important instrument to farmers, the plough, the fertility of the soil may be maintained. So many valuable essays have of late been published upon this subject, that we will not extend our remarks; but beg leave to refer to that of J. Hamilton Couper, republished in the *Northern Farmer* of 9th March 1833, as containing much valuable information, and as being worthy of an attentive perusal. Connected with this subject is the adaptation of the different soils to the various kinds of plants. Many skilful farmers acquire some practical knowledge of this subject, without understanding its true principles. Indeed, these principles cannot be well understood without the aid of the science of Chemistry. Chemical Science is indispensable to the Physician; but it falls not exclusively within his province. The practical farmer will find it of vast service in his pursuit. Its study ought therefore to be encouraged.

By ascertaining the food which different kinds of vegetables require, and the nutritious qualities of the various soils, the agriculturist is enabled to decide how he can, generally, produce the largest crops, with the least labor and expense.

He cannot have sufficient foresight to guard against unpropitious seasons; but acting upon enlightened principles and correct theories, his prospects of a good harvest will seldom be cut off. Our present object is to submit a few remarks upon two of our most essential agricultural products, potatoes and corn.

In this section, we raise no vegetable of greater profit or more general use than the potato. And its annual consumption seems to be yet on the increase. We learn from aged persons, that some fifty or sixty years ago ten or fifteen bushels of potatoes were considered as a large crop for each farmer; and at that period, it was as un-

common for a slaughtered swine to weigh 250 lbs. as it now is, to weigh seven or eight hundred—Now, a thousand bushels or even fifteen hundred, is not an uncommon crop, upon a farm of one hundred and fifty or two hundred acres.

It has been believed by many, that high, sandy, or gravelly soils are best adapted to the growth of potatoes. But the modern theory, proved by experiment, is, that a low cold bottom, or clay-pan is preferable. I have for several years cultivated this vegetable upon a low, level, clay-pan, taking care to have proper drains in case of heavy rains; and find that it not only yields largely, but that the quality or flavor of the potato is superior to that of those produced on high, sandy soils. A cold bottom is more congenial to them. And it is generally known, that in a cold, wet season, they flourish better, than in a very warm and dry one. But when planted in low lands, the drains should always be kept open, to prevent overflowing.

It is said that in some parts of Ireland, famous for excellent potatoes, the potatoes are planted in low, and boggy lands, in beds, between which a ditch or drain is cut; and that the mud or most nutritious portion of the soil which gradually collects in these ditches, is taken up to cover the potatoes. The practice, which many farmers are adopting, of laying out their low and marshy lands into beds rising in the centre, of four four or five rods in width, with intervening drains, running towards a common outlet, will prove highly beneficial; and when there shall be a great increase of population, and the value of our lands shall be greatly enhanced, this practice will be adopted by all good farmers. It will then be admitted by all, that our valleys, and swamps contain the most fertile soil. In these, have been collecting for ages, decomposed vegetable matter, which constitutes the deep black soil. This kind of soil conveyed on to high sandy barren land, with a mixture of animal manure, will convert the latter into fruitful fields. And the fertility of the low land is increased by spreading upon its surface, loose sand or gravel from the hills.

The old practice of making the potato hill in an oval form or the shape of a sugar loaf, is very censurable. The same remark is applicable to the corn hill. Because, hills so formed, do not absorb so much moisture, when the rains descend, as hills flat at the top.

It is believed that a former practice of planting small potatoes, is now universally condemned. But many are yet of opinion, that it is as judicious to plant cut potatoes, or slips, or the eyes, as whole potatoes. This practice is contrary to the course of nature. Nature is always right, in all her operations. The Farmer should take nature for his great and unerring guide.—Hundreds of various theories have been published upon this important point. The result of our observations and reflections, respecting it, is, that it is always best to plant the best potatoes whole, except those containing too many eyes, of unusually large size. The latter may be divided. I raised a potato, perfectly sound, of an oval form, weighing two and one half pounds. This I cut into twelve pieces, which from twelve hills, yielded two bushels. If slips are planted, the plants or sprouts come up more slender and feeble. In favorable seasons, they may often look very well,

but not so well as those from the whole potato. Care should be taken to prevent the growth of too many sprouts or stalks. Four or five in a common hill are sufficient. The size of the potato depends very much upon the number of stalks, and the size as well as richness of the hill. Potatoes degenerate by means of an improper mode of cultivation, and not from the climate. This vegetable of inestimable value contributes most to the health, growth and fatness of cattle, after being boiled, or steamed. It ought never to be given to swine in a raw state, unless, possibly, in the warmest season of the year, after being partially dried.

The common practice of mutilating corn stalks, or "topping corn," before the ear has come to maturity, ought to be condemned. It may be difficult to account for the origin of so singular a practice. But we trust that its termination will not be at a day far distant. It stands opposed to reason and philosophy. But our suggestions upon this important subject must be deferred until a more convenient time.

W. CLAGGETT.

Portsmouth, February 19.

### CLAIRMONT NURSERY,

3 Miles East of Baltimore.

ROBERT SINCLAIR, Senr.



Proprietor, hereby informs his friends and the public that he expects the weather will be suitable to commence filling orders about the middle of the present month.

And owing to the winter setting in so unusually early, it is believed prevented many persons from ordering who intended to have done so, and even many orders that did come, had to remain unfilled until the spring, consequently his stock remains good for most articles as advertised last fall—particularly Apple, Peach, Plum, Quince, English Raspberry, Strawberry, Gooseberry, Currant, Grape Vines, three years old, and Cuttings of the same, a few hundred Morus Multicaulis, and other Mulberry Trees, Ornamental shade Trees, many kinds, and several of them of large size, Balsam Fir, or Balm of Gilead, and other evergreens, and a superb collection of Garden and China Roses, and other beautiful Flowering Shrubs, Honey Suckles, Violes and Creepers, Rhubarb for tarts, &c. See printed and priced catalogues, to be had of the proprietor, gratis, or of R. S. jr. in Light street.

Also will be delivered to customers, strong thrifty potted Plants; about the middle of May, a splendid assortment of double Dahlias, consisting of about one hundred varieties, carefully selected from among the best and latest importations. Printed catalogues will be furnished as above.

A few more pair white Turkeys, and 2 male Peacocks  
Feb 14

### GARDEN SEED.

THE subscriber has just received his general supply of fresh Garden Seeds from the Messrs. Landreth's of Philadelphia—those for retailing bearing their label and warranted. The Messrs. Landreth's grow the most of the seeds they vend, and theirs is the oldest and probably the most extensive establishment in this country, and their seeds have no rival as to quality. Orders from country dealers will be supplied at short notice. Catalogues furnished gratis.

JONATHAN S. EASTMAN.

Feb. 14

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## BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every morning

	PER	FROM	TO
BEANS, white field, .....	bushel.	1 75	—
CATTLE, on the hoof, .....	100lbs	6 50	8 50
CORN, yellow, .....	bushel	90	91
"    white, .....	"	85	86
COTTON, Virginia, .....	pound	—	—
North Carolina, .....	"	—	—
Upland, .....	"	18 1/2	20
Louisiana 20a21-Alabama	"	18	21
FEATHERS, .....	pound.	50	—
FLAXSEED, .....	bushel.	1 62	1 75
FLOUR & MEAL—Best wh. wh't fam.	barrel.	12 00	13 00
Do. do. baker's, .....	"	—	—
Do. do. Superfine, ex. ....	"	10 00	10 25
Superfine, st. in good de'd	"	9 75	10 73 1/2
"    "    wagon price, .....	"	10 9	50
City Mills, super, .....	"	9 50	dull
Do extra, .....	"	9 50	—
Susquehanna, .....	"	—	10 50
Rye, .....	"	7 25	7 80
Kiln-dried Meal, in hhds.	hhd.	—	21 50
do. in bbls. ....	bbl.	4 87	5 00
GRASS SEEDS, red Clover, .....	bushel.	8 00	8 50
Timothy (herds of the north)	"	3 25	4 00
Orchard, .....	"	—	2 75
Tall meadow Oat, .....	"	—	2 75
Herds, or red top, .....	"	—	1 25
HAY, in bulk, .....	ton.	—	20 00
HEMP, country, dew rotted, .....	pound.	6	7
"    water rotted, .....	"	7	8
HOGS, on the hoof, .....	100lb.	7 75	8 50
Slaughtered, .....	"	7 25	7 75
HOPS—first sort, .....	pound.	16	—
second, .....	"	14	—
refuse, .....	"	12	—
LIME, .....	bushel.	35	37
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS, .....	"	62	65
PEAS, red eye, .....	bushel.	—	—
Black eye, .....	"	1 12	—
Lady, .....	"	—	—
PLASTER PARIS, in the stone, .....	ton.	4 75	—
Ground, .....	barrel.	1 50	—
PADMA CHRISTA BEAN, .....	bushel.	—	—
RICE, .....	pound.	3	4
RYE, .....	bushel.	1 12	1 25
Susquehanna, .....	"	—	—
Tobacco, crop, common, .....	100 lbs	3 50	4 50
"    brown and red, .....	"	4 50	0 00
"    fine red, .....	"	7 00	7 90
"    wrappery, suitable	"	—	—
"    for segars, .....	"	5 00	10 00
"    yellow and red, .....	"	6 00	8 00
"    good yellow, .....	"	8 00	12 00
"    fine yellow, .....	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	5 00
"    ground leaf, .....	"	5 00	8 00
Virginia, .....	"	7 00	14 00
Rappahannock, .....	"	—	—
Kentucky, .....	"	8 00	14 00
WHEAT, white, .....	bushel.	—	2 15
Red, best, .....	"	1 75	2 05
fair to good 180a200 inferior,	"	1 20	1 60
WHISKY, 1st pf. in bbls. ....	gallon.	42	42 1/2
"    in hhds. ....	"	39 1/2	—
"    wagon price, .....	"	36	37
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 75	—
To Wheeling, .....	"	2 00	—
WOOL, Prime & Saxon Fleeces, ..	pound.	50 to 60	30 32
Full Merino, .....	"	45	50 28 30
Three fourths Merino, .....	"	42	45 26 28
One half do, .....	"	38	42 26 28
Common & one fourth Meri.	"	35	38 26 28
Pulled, .....	"	38	40 26 28
Howard st. Flour, sales limited, receipts very light.			

## A BARGAIN.

For sale a Devon cow with her third calf. The calf is a male, a few weeks old. The cow is a perfect model of her beautiful breed, and both warranted pure. Any gentleman wishing to obtain this excellent strain of English cattle cheaply, will do well to make early application to the subscriber. Price of cow and calf, \$95.

Apply to EWD. P. ROBERTS, Baltimore, Md.

## BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES, .....	barrel.	—	—
BACON, hams, new, Balt. cured...	pound.	17	18
Shoulders, .....	"	—	15
Middlings, .....	"	—	15
Assorted, country, .....	"	—	14
BUTTER, printed, in lbs. & half lbs.	"	25	37
Roll, .....	"	20	28
CIDER, .....	barrel.	1 00	1 25
CALVES, three to six weeks old...	each.	4 50	6 00
COWS, new milch, .....	"	35 00	50 00
Dry, .....	"	10 00	13 00
CORN MEAL, for family use, .....	100lbs.	—	1 93
CHOP RYE, .....	"	—	2 25
EGGS, .....	dozen.	18	25
FISH, Shad, No. 1, Susquehanna,	barrel.	—	—
No. 2, .....	"	—	—
Herrings, salted, No. 1, .....	"	3 50	—
Mackerel, No. 1, ————No. 2	"	9 50	10 50
No. 3, .....	"	—	6 75
Cod, salted, .....	cwt.	—	—
LARD, .....	pound.	16	17

## BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank, .....	par	Farmers Bank of Virginia 1 1/2
Branch at Baltimore, .....	do	Bank of Virginia, .....
Other Branches, .....	do	Branch at Fredericksburg do
MARYLAND.		Petersburg, .....
Banks in Baltimore, .....	par	Norfolk, .....
Hagerstown, .....	2a	Winchester, .....
Frederick, .....	do	Lynchburg, .....
Westminster, .....	do	Danville, .....
Farmers' Bank of Mary'd, do	do	Bank of the Valley, ... 1a2
Do. payable at Easton, ... 2	do	Branch at Romney, ... 1
Salisbury, ... 1 per ct. dis.	do	Do. Charlestown, do
Cumberland, .....	2	Do. Leesburg, ... 1
Millington, .....	do	Wheeling Banks, ... 2a3
DISTRICT.		Ohio Banks, generally 4a5
Washington, } Banks, 3.		New Jersey Banks gen. 2a2 1/2
Georgetown, }		New York City, ... 3a
Alexandria, }		New York State, ... 3a3 1/2
PENNSYLVANIA.		Massachusetts, ... 2a3
Philadelphia, .....	1a	Connecticut, ... 2a3
Chambersburg, .....	1	New Hampshire, ... 2a3
Gettysburg, .....	do	Maine, .....
Pittsburg, .....	2a2 1/2	Rhode Island, ... 2a
York, .....	1a	North Carolina, ... 3a4
Other Pennsylvania Bks. 1a2		South Carolina, ... 3a4
Delaware [under \$5] ... 3a4		Georgia, .....
Do. [over 5] ... 4a3		New Orleans, ... 6a7
Michigan Banks, .....	6a	
Canadian do, .....	6a	

## SPANISH JACKS.

The subscriber has for sale five Spanish Jacks, imported in 1836. They are all young, and certified to be proved breeders. They are of good size, being from 52 to 55 inches in height, stout built and healthy: colors white and gray.

The exportation from Spain of Jacks of this quality and breed is by law strictly prohibited; but the near approach of the army under Gen. Gomez last fall to Malaga, caused the shipment of these Jacks, among other valuable property, from that port. Considering these circumstances, it is improbable that another opportunity of procuring such Jacks will occur. These will be sold for from \$1,000 to \$1,500 each, if immediately applied for, but if not sold soon, they will be placed at service for the season at hand.

Also, a young Jack, bred in this country from first rate stock, gray, two years old, and of good promise. Price \$500.

Also, several fine JENNETS, some of them in foal to a Maltese Jack, 14 hands high.

Also, a very fine improved Durham short-horn BULL, purchased at Col. Powell's sale last November. He is about eighteen months old, nearly all red, and has a perfect pedigree. Price \$300. Apply to

J. J. HITCHCOCK, Agricultural Agent, No. 5 South Fifth street, feb 28—4t Philadelphia.

## MORUS MULTICAULIS TREES.

THE SUBSCRIBER has for sale, 4,000 Morus Multicaulis trees, one and two years old, which he will sell at \$25 per hundred.

EDWARD P. ROBERTS, Editor Farmer & Gardener.

## 20,000 MORUS MULTICAULIS TREES.

The subscriber has received the first parcel of an invoice of 20,000 Morus Multicaulis trees, which he offers or sale on pleasing terms for cash. They are warranted genuine, and if taken in their original packages bargains may be expected.

EDW. P. ROBERTS,

March 7. 4t. Baltimore, Md.

## GARDEN SEEDS.

The subscribers are now opening a superior lot of GARDEN SEEDS, growth of 1836. The most prominent seeds received and for sale are—

250 bushels Garden PEAS, of various sorts.

150 do Dwarf and Pole BEANS.

2000 lbs. CABBAGE SEEDS,

among which are Scotch Early York, a superior cabbage; Flat Dutch, Drumhead, Savoy, Early Bullocksheart, Early French, &c.

250 lbs. CUCUMBER SEED, of various sorts, including Keene's fine long green, white spined, &c.

1500 lbs. Mason's scarlet short top RADISH SEED; yellow turnip, long white, and every other variety of Radish.

1000 lbs. Mangel wurtzel, French Sugar and Table BEET SEED.

50 lbs. Kale Seed of various sorts

200 " Carrot Seed for table and field

30 " Lettuce Seed, several finest kind

250 " Onion Seed

300 " Ruta Baga Seed

Also, Tart Rhubarb Seed, Tomato, Egg Plant, Squash, Salsafy, Spinach, Okra, Leek, Celery, Endive, &c. &c.

FIELD SEEDS—English Perennial Rye Grass Seed; Lawn Grass; yellow and scarlet Trefoil; Lucerne; English and American Oats; Huskless Oats; Gama Grass

Roots and Seed, early and late Potatoes; 10 kinds Corn, best early and late sorts; Albany field and Cow Peas;

Clover Seed; Timothy; Herd Grass; Millet; Orchard Grass; Buckwheat; and in short every other Seed, Tool or Implement appertaining to the want of the farmer and gardener.

ROBT. SINCLAIR, Jr. & Co.

March 7. Light, near Pratt street wharf.

## LIME-SPREADER.

J. S. EASTMAN, PRATT-STREET, Has now finished several of the above machines. The price is fixed as follows:

For the machine complete, .....	\$100
Do. exclusive of the wheels, shafts and axle, ..	60
For applying the machinery to a common cart 45	
For the machinery alone .....	40
Including the patent fee in each case. .....	fe 28 3t

## MORUS MULTICAULIS SEED.

THE undersigned offers for sale the seed of genuine Morus Multicaulis, imported from France by Smith and Sons, New York, and warranted the growth of 1836. Said seed is put up in half oz. papers, and will be sent per mail free of charge to any part of the U. S. on the receipt of \$3 for one, or \$5 for two papers. Notes of all solvent banks received in payment. This seed is warranted to produce the genuine Chinese variety, and the money in all cases will be refunded on satisfactory proof to the contrary. Short directions for culture furnished each order.

Feb. 1837—29 SETH WHALEN, P. M.

Whalen's store, New York.

## GAMA GRASS ROOTS.

JUST received and in fine order, 15,000 GAMA GRASS ROOTS. This grass is particularly adapted for soiling, bears cutting every fifteen days, and of course the product is immense. Price per 100 roots, \$2.

ROBT. SINCLAIR, Jr. & CO.

mh 7 Light, near Pratt street wharf.

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